Additional circuitry, in the form of opto-isolator IC8, monostable IC7 and associated components, is provided to interrupt the logic supply if the CA computer fails. IC8 is driven via R21 from the CA 'watchdog' pulse signal CA_MON. *('If CA_MON is flappy, the CA is happy, but if it is still, the CA is ill.')* The output of IC8 triggers the first stage of IC7.

The first stage of IC7 is normally retriggered by the CA_MON signal from IC8. If the CA computer fails, this retriggering will cease, and the second stage of IC7 will be triggered. TR4 will now briefly turn on, causing the output of IC5 to fall to within about 1.25 volts of the 0V line. This resets all of the faders into 'Non-CA mode' (i.e. Audio passes through the fader). TR1 will also turn on, energising the CA_FAIL Relay RL1, thus linking the master fader send (PL2) back to the master fader return, and allowing manual mixing to continue.

The CA Failure Detection circuitry is all powered by a separate low power 5V regulator, IC6. Note that link LK5 must be fitted for the CA failure monitor circuitry to operate.

4.2 Test and Calibration

4.2.1 ±15V Rails and +5V Logic Rail

With the console fully loaded, adjust the ±15V rails for 15V ±0.1V measured on the power Molex on the fader bus card nearest the connector panel.

Similarly adjust the logic rail for 5.0V±5mV

The table below shows the pin functions of the Molex connector.

Pin	Function
1	+15V
2	0V
3	0V
4	-15V
5	0V Digital
6	+5V

4.2.2 Calibrating the 5V Reference

The master 5V reference for all faders is generated on the 82E358 Group Fader bus card.

Measuring between test points TP1 (+5V) and TP2 (0V) on the Group Fader bus card, adjust VR1 for 5.0V ±1mV.